

ADAPTIVE SIDETONE AND ADAPTIVE VOICE ACTIVITY DETECT (VAD) THRESHOLD FOR SPEECH PROCESSING

ABSTRACT OF THE DISCLOSURE

5 Systems and methods for adaptive sidetone and adaptive voice activity detect
(VAD) threshold for speech processing are disclosed. The VAD system generally
includes an adaptive VAD threshold generator configured to generate a VAD threshold
based on an increase in voice level resulting from sidetone attenuation and a comparator
for comparing received signals to the adaptive VAD threshold to determine the existence
10 of voice activity. The sidetone attenuation is based on an average ambient noise energy
level determined from a noise energy amplitude during periods of no voice activity and a
comparator for comparing received signals to the adaptive VAD threshold to determine
existence of voice activity.